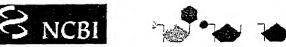
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Docket No.: 2825.2025-001

Title: Association of Thrombospondin...

Stacey Bolk, et al. Inventors:





Nucleotide Structure Popset PubMed Protein Genome Nucleotide Search Nucleotide for Clipboard Limits Index History View as HTML 11/4 t Indo to Clippoard Default Hide Brie □ 1: GI = "4507486" [GenBank] Homo sapiens thrombospondin... PubMed, Protein, Related Sequences. 31-OCT-2000 PRI NM 003247 5784 bp mRNA LOCUS Homo sapiens thrombospondin 2 (THBS2), mRNA. DEFINITION NM 003247 ACCESSION NM_003247.1 GI:4507486 VERSION KEYWORDS SOURCE human. ORGANISM Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 5784) REFERENCE LaBell, T.L., Milewicz, D.J., Disteche, C.M. and Byers, P.H. AUTHORS Thrombospondin II: partial cDNA sequence, chromosome location, and TITLE expression of a second member of the thrombospondin gene family in Genomics 12 (3), 421-429 (1992) JOURNAL MEDLINE 92217961 (bases 1 to 5784) REFERENCE LaBell, T.L. and Byers, P.H. AUTHORS Sequence and characterization of the complete human thrombospondin TITLE 2 cDNA: potential regulatory role for the 3' untranslated region Genomics 17 (1), 225-229 (1993) JOURNAL 94010892 MEDLINE PROVISIONAL REFSEQ: This record has not yet been subject to final COMMENT NCBI review. The reference sequence was derived from <u>L12350.1</u>. **FEATURES** Location/Qualifiers 1..5784 source /organism="Homo sapiens" /db_xref="taxon:9606" /chromosome="6" /map="6q27" /cell_type="fibroblast" /tissue_type="connective" /dev_stage="adult" gene 1..5784 /gene="THBS2" /note="TSP2" /db xref="LocusID: 7058" /db_xref="MIM: 188061" sig peptide 240..293 /gene="THBS2" 240..3758 CDS /gene="THBS2" /standard_name="TSP2"

FIG. 1a

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Docket No.: 2825.2025-001

Inventors:

Title: Association of Thrombospondin...

Stacey Bolk, et al.

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Docket No.: 2825.2025-001 Title: Association of Thrombospondin... Inventors: Stacey Bolk, *et al.*

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Docket No.: 2825.2025-001

Title: Association of Thrombospondin...

Inventors:

Stacey Bolk, et al.

Novel association found in Gene Quest with thrombospondin 2 (THBS2)

Association Odds ratios (with 95% confidence intervals) for association of THBS2 genotypes with CAD and MI in the Gene Quest population.

THBS2	CAD cases	controls	Odds ratios (95% C.I.)	P value	adjusted ORs (95% C.I.)	P value
tt	160 (.48)	207 (.51)	1.0	-	1.0	
tg	153 (.46)	158 (.39)	1.25 (.93-1.70)	.15	1.24 (.88-1.76)	.23
gg	17 (.05)	39 (.10)	.56 (.31-1.03)	.06	.65 (.34-1.26)	.20
			*χ2 p value=.025			
THBS2	MI cases	controls	Odds ratios (95%	P	adjusted ORs	P
			C.I.)	value	(95% C.I.)	value
tt	84 (.47)	207 (.51)	1.0	-	1.0	-
tg	87 (.49)	158 (.39)	1.36 (.94-1.95)	.10	1.38 (.92-2.09)	.12
gg	6 (.03)	39 (.10)	.38 (.1693)	.03	.39 (.15-1.03)	.06
			*x2 p value=.0085			

^{*}the $\chi 2$ statistic tests for a difference in the distribution of genotypes in the table of data CAD=coronary artery disease

MI=myocardial infarction

Adjusted ORs=adjusted odds ratio

Heterozygotes show a (non-significant) trend for increased risk of MI. Homozygotes for the variant allele (g) appear to have a significant protective effect. Both of these effects are independent of BMI, hypertension, diabetes, current age and gender (see Oradj).

Multivariate logistic regression taking all three THBS genes into account for their association with

MI.			
GENOTYPE	N	OR (MI)	P (MI)
TSP1 NN	177	1.00	-
TSP1_SN	52	1.07	.76
TSP1_SS	5	8.44	.06
TSP2_tt	103	1.00	******
TSP2_tg	106	1.54	.03
TSP2_gg	9	0.51	.12
TSP4_AA	133	1.00	-
TSP4 AP	94	1.79	0.004
TSP4_PP	14	1.54	.31